

REMARKS

Reconsideration and withdrawal of the rejections with respect the pending claims are respectfully requested in view of the foregoing amendments and the following remarks.

Initially with respect to the Examiner's objection to the numbering of the claims as being incorrectly numbered, Applicant has renumbered the claims according to the Examiner's suggestions which should obviate further objection thereto.

In addition and with respect to the Examiner's objection under 35 USC §112, claim 26 has been amended to positively recite that at least one end effectors removably engages the chassis. Claim 1 has also been canceled by this amendment.

Turning now to the Examiner's rejection of claims 24-33 under 35 §102(b) as being anticipated by U.S. Patent No. 5,403,312 to Yates, it is respectfully submitted that claims 24 and 33 (as amended) are not anticipated by this reference for at least the reasons set forth below. Likewise, claims 25-32 which depend either directly or indirectly from claim 24 are also not anticipated by this reference.

More particularly, Yates '312 discloses a bipolar electrosurgical stapler which includes offset electrodes disclosed on opposite jaw members or on the same jaw member but offset by an insulator. A feedback circuit is disclosed which measures the tissue impedance to indicate whether coagulation has occurred:

The feedback system may also determine tissue characteristics at or near a coagulation zone which indicate degree of coagulation. The electrical impedance of the tissue to which the electrical energy is applied may also be used to indicate coagulation. Yates '312 - Col. 8, lines 18-22. (Emphasis added).

If coagulation has occurred to a predetermined or desired degree, an indication means indicates that the energy should be tuned off. Yates '312 - Co. 8, lines 46-49. (Emphasis added).

The feedback means may also control the generator and turn the energy off at a certain impedance level. Yates '312 - Col 8, lines 50-52. (Emphasis added).

No where does Yates '312 mention that energy is selectively applied in response to the impedance measurement as presently claimed. More particularly, the Yates '312 patent does not describe a sensor which communicates with feedback circuitry which operates in the same fashion described by the presently claimed invention, i.e., the Yates '312 circuitry does applying electrical energy in response to the impedance measurement across the tissue from the sensor. The Yates '312 feedback circuit as described simply relates an end condition of the tissue, i.e., determines the extent of the coagulation of the tissue. Yates '312 does not provide feedback for adjusting the supply of electrical energy in response to the tissue impedance as it relates to vessel sealing.

It is respectfully suggested that this is primarily due to the fact that the Yates '312 patent relates to tissue coagulation and not tissue sealing which are basically different tissue treatments. The actual physical parameters associated with accurately and effectively sealing vessels/tissue versus coagulating vessels are fundamentally different. For example, there are a multitude of mechanical and electrical parameters and issues which must be carefully considered and overcome when sealing tissue which are completely irrelevant when simply coagulating tissue. In fact, vessel sealing is much more than simple coagulation which simply heats tissue to create a clot or proximal thrombus and limit the flow of blood through the vessel lumen.

In order to effectively and consistently seal tissue, a compressive sealing force is required between opposing sealing surfaces and the gap distance between opposing sealing surfaces must be accurately controlled to allow the tissue to melt, cross link and reform into a generally homogenous mass with limited demarcation between opposing tissue structures. Moreover, it is important to accurately control and regulate the electrical energy during the tissue sealing cycle to produce an effective tissue seal. As such, the sensor which provides active feedback to the electrical energy source allows the generator to selectively adjust the amount of electrosurgical energy in response to the measurement of tissue impedance during the sealing cycle to achieve effective tissue sealing. The end result: tissue sealing provides a much more effective and consistent tissue closure mechanism because the vessel or lumen

is not simply blocked by a sticky coagulum build-up (proximal thrombus) but, rather, the path is essentially fused shut and is not prone to leakage. As such, the Yates '312 patent which simply teaches tissue coagulation and a feedback circuit which simply monitors an end tissue condition (as detailed in the Yates '312 specification above) is distinguishable.

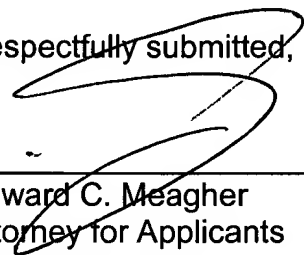
Moreover, it is respectfully submitted that the claims as newly amended which include complimenting vessel sealing electrodes which partially matingly engage one another are not anticipated, taught or suggested by Yates '312 either taken alone or in combination with U.S. Patent Number 5,197,964 to Parins. No where is it taught or suggested in either of these patents (or any other prior art reference) that the electrodes are complimentary and partially matingly engage one another to selectively seal and/or cut tissue upon the application of electrosurgical energy. As a result, it is respectfully submitted that these claims are in and of themselves novel, unanticipated and unobvious in view of the prior art and combination of the prior art of record and, therefore, are deserved of patent protection.

Applicants have also included a terminal disclaimer which disclaims the terminal portion of the statutory term of any claims which would extend beyond the expiration date of the full statutory term of U.S. Patent Number 6,267,761. The Assignee of the instant application namely, Sherwood Services

AG, owns 100% interest in both the present application and U.S. Patent No. 6,267,761.

In view of the foregoing, it is respectfully submitted that all of the claims of the present application, namely, claims 24-33, are in condition for allowance. Accordingly, passage of the application to issue at an early date is earnestly solicited.

Respectfully submitted,



Edward C. Meagher
Attorney for Applicants
Reg. No. 41,189

CARTER, DELUCA, FARRELL & SCHMIDT, LLP
445 Broad Hollow Road - Suite 225
Melville, New York 11747
631-501-5708 (T)
631-501-3526 (F)